

AMENDMENTS TO THE CLAIMS

The claims have been reproduced in their entirety with appropriate indications of their respective statuses.

1-71. (Canceled)

72. (Currently Amended) A controlled-release composition for topical application to a substrate, said composition comprising: an oil-in-water emulsion substantially free of lipophilic solvent ~~and formed by mechanical inversion of a water-in-oil emulsion and an active agent comprising a protein incorporated into said emulsion,~~ wherein said the oil-in-water emulsion has a hydrophilic phase comprising ~~said~~ a protein as an active agent, water, and a carrier, and a hydrophobic phase comprising a silicone component.

73. (Canceled)

74. (Previously Presented) A controlled-release composition as set forth in claim 72 further comprising a surfactant between said hydrophilic and hydrophobic phases.

75. (Previously Presented) A controlled-release composition as set forth in claim 72 wherein said carrier is selected from the group of glycerin, propylene glycol, polyethylene glycol, poloxamer, alcohol, polyhydric alcohol, water, polyvinyl alcohol, polyvinylpyrrolidone, and combinations thereof.

76. (Previously Presented) A controlled-release composition as set forth in claim 72 wherein said carrier is in solution with said water.

77. (Previously Presented) A controlled-release composition as set forth in claim 72 wherein said protein is an enzyme.

78. (Previously Presented) A controlled-release composition as set forth in claim 77 wherein said enzyme is selected from the group of natural enzymes, synthetic enzymes, engineered enzymes, and combinations thereof.

79. (Previously Presented) A controlled-release composition as set forth in claim 77 wherein said enzyme is selected from the group of oxidoreductases, transferases, isomerases, ligases, hydrolases, cutinases, oxidases, reductases, hemicellulases, esterases, pectinases, lactases, peroxidases, laccases, catalases, and combinations thereof.

80. (Previously Presented) A controlled-release composition as set forth in claim 77 wherein said enzyme comprises Protease A, Protease B, or LG12.

81. (Currently Amended) A controlled-release composition as set forth in claim 74 further comprising a dispersing agent for dispersing said ~~active agent~~ protein.

82. (Previously Presented) A controlled-release composition as set forth in claim 81 wherein said dispersing agent comprises a silicone-based surfactant different from said surfactant.

83. (Previously Presented) A controlled-release composition as set forth in claim 72 wherein said silicone component is selected from the group consisting of a silicone gum, a silicone rubber, a silicone elastomer, a silicone resin, high molecular weight silicones, silicone emulsions, and combinations thereof.

84. (Previously Presented) A controlled-release composition as set forth in claim 72 wherein said silicone component comprises a pressure sensitive adhesive.

85. (Previously Presented) A controlled-release composition as set forth in claim 84 wherein said pressure sensitive adhesive comprises the reaction product of; a hydroxy endblocked polydimethylsiloxane polymer, and a hydroxy functional silicate resin.

86. (Previously Presented) A controlled-release composition as set forth in claim 85 wherein said hydroxy functional silicate resin is further defined as a trimethylsiloxo and hydroxy endblocked silicate resin.

87. (Previously Presented) A controlled release composition as set forth in claim 72 in the form of a multi-layer dressing for topical application to a substrate, said dressing comprising: (A) a controlled-release layer formed from said controlled-release composition of claim 72; (B) an adhesive layer disposed adjacent said controlled-release layer for adhering said dressing to the substrate; and (C) an additional layer selected from the group of a backing layer, a cushioning layer, an absorbent layer, a second adhesive layer, and combinations thereof.

88. (Previously Presented) A controlled release composition as set forth in claim 87 wherein said controlled-release layer is adjacent the substrate and said additional layer is disposed adjacent said adhesive layer spaced from said controlled-release layer.

89. (Previously Presented) A controlled release composition as set forth in claim 87 wherein said controlled-release layer is dry in said dressing such that said controlled-release layer is free of water after said controlled-release layer is formed by said controlled-release composition.

90. (Previously Presented) A method of delivering the controlled release composition of claim 72 to a substrate comprising:

applying the controlled release composition to a dressing; and  
applying the dressing to the substrate.

91. (Previously Presented) The controlled-release composition as set forth in claim 72 wherein said protein is selected from the group of antibodies, polypeptides, peptides, hormones, cytokines, growth factors, biological modulators, and combinations thereof.